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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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### *DETAILED ACTION*

1. This office action is in reply to an amendment filed on 01/20/2010. Claims 2-3 are previously canceled. Thus claims 1 and 4-21 are pending of which claims 1, 11 and 21 are independent.

### ***Priority***

2. This application does not claim priority. Therefore, the effective filing data for the subject matter defined in the pending claims of this application is **12/12/2003**.

### ***Response to Argument***

- 3 Applicant's remark/arguments filed on January 20, 2010 have been fully considered but they are not persuasive.

**Referring to the Independent claims 1, 11 and 21**, Applicant's representative argued that the reference/s on the record, namely neither Carter nor Rider teach, suggest, or disclose the following amended/bolded limitation, "building a member definition comprising a member identifier, an access control list, **a private key of a key pair for use in encrypting the document,**..."

**Applicant's representative on page 7 of the submitted remark wrote the following in support of the above argument.**

*"Carter, which is cited by the Examiner as disclosing building a member definition, fails to teach the member definition including, inter alia, **a private key***

*of a key pair, as now recited in claim 1. The deficiencies of Carter are not remedied by Rider, which is cited as teaching linking the member definition to a first data portion of a document, receiving a request from the user to access the document, comparing the request with the access right, and allowing access to only the first data portion, or Frey, which is cited as teaching an access control list. In view of the foregoing, it is apparent that the cited combination fails to teach or suggest the invention as recited in claim 1; therefore, the rejection is not supported by the cited combination and should be withdrawn. Claims 11 and 21 include limitations similar to those of claim 1 and are therefore also deemed to be in condition for allowance for at least the same reasons presented above. Claims 4-10 and 12-20 depend from and further limit claims 1 and 11 and therefore are deemed to be in condition for allowance for at least that reason”*

**Examiner disagrees with the above argument.**

Examiner counters that a careful reading of reference in particular the primary reference on the record Carter reveals that the feature argued by the applicant’s representative is indeed still taught by the reference/s on the record.

Examiner would like to point out that, Carter on column 14 lines 16-22 and column 14, lines 4-5 discloses the following which meets the limitation recited as “building a member definition comprising, **a private key of a key pair for use in encrypting the document.**”

“As noted, the member definition 96 includes the encrypted message digest 102 if the member in question has collaboratively signed the document 90. As

explained in greater detail below in connection with FIG. 10, **the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90.**" Furthermore on column 14, lines 4-5, it has also been disclosed that **the private key 80 is a key pair which corresponds to the public key 78.** Thus contrary to the argument presented by the applicant's representative, the message digest 102 which is **formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90 implicitly contains the private key of the member who is signing the document. With out the private key, it is not possible to produce the said message digest. Furthermore as it is disclosed on column 14, lines 4-5, the private key 80 is a key pair which corresponds to the public key 78 and this meets the argued limitation, "building a member definition comprising, a private key of a key pair for use in encrypting the document"**

Thus for the above reasons, the argued limitation of the respective independent claims 1, 11 and 21 is taught by the reference/s on the record. Thus the previous rejection set forth in the previous office action is maintained.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and

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exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Based on a thorough review of the entire disclosure and a text search for the following bolded amended limitation ““building a member definition comprising, **a private key of a key pair for use in encrypting the document**”, there is no “readily apparent support” explicitly indicating the fact that the member definition includes the private key for use in encrypting the document. Examiner would like to point out that figure 2 of the applicant’s submitted drawing indicate that the member definition includes only member identifier, access control list and digital signature. Applicant’s representative is required to indicate where in the specification such limitation is explicitly disclosed.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:
- Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
7. Claims 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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8. Claims 1-10 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. **In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008)**; Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps: recited in independent claim 1, is broad enough that the steps could be done or completely performed mentally, verbally or **without a machine** nor is any transformation apparent. Thus, the claims are non-statutory.

9. **Claims 11-20** are directed to a system claim. Examiner asserts that the limitations recited in the claim raises a question as to whether or not it contains any hardware elements such as microprocessor. **Therefore these system claims do not fall within the statutory classes listed in 35 USC 101.** The language of the claims raises a question as to whether the claims are

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directed merely to an abstract idea that is not tied to a technological art, environment or machine to form the basis of statutory subject matter under 35 U.S.C. 101. See MPEP § 2106 IV. B. 1(a).

10. **Independent Claim 21** recites the following limitation at the beginning of the claim. "A computer readable medium " Examiner asserts that claim 21 does not fall within the statutory classes listed in 35 USC 101 because the computer readable medium can be broadly interpreted as signal and carrier wave, which is not statutory subject matter. It is recommended that the above limitation is replaced by the following limitation, "A non-transitory computer readable storage medium"

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 1, 4-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stephen R. Carter** (hereinafter referred as **Carter**)(U.S. Patent No. 5,787,175) (Date of patent 28, 1998), in view of **Rider** (hereinafter referred to as **Rider**) (U.S. Patent Publication 2006/0173999 A1) (filed on 08/07/2003, claims



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priority of a provisional application filed on 08/07/2002) further in view Frey et al (hereinafter referred as **Frey**) (U.S. Patent No. 7,017,183 B1, filed on Jun 29, 2001)

13. **As per independent claim 1 Carter discloses a method for controlling access to a document, [Abstract] comprising:**

- **Determining an access right for a user; (Column 12, lines 56-63; column 15, lines 62-67; abstract and column 8, lines 27-29)** *(Access control Methods FIGS. 4-9 illustrate one method according to the present invention for controlling collaborative access to the work group document 90. In particular, the method includes computer-implemented steps for collaboratively encrypting the document 90 (FIG. 6) and steps for restricting access to the data portion 94 of the collaboratively encrypted document (FIG. 9)).*
- **building a member definition** *[Figure 5, see "member definition"]*  
**comprising a member identifier** *[Figure 5, ref. Num "98", See "member identifier"]*, **an access control** *[See column 12, lines 56-57; column 13, lines 52-62, see figure 5, ref. Num 100, "encrypted document key" signed by the public key of the member. Only the member with the corresponding private key can access the document. In particular see the following which is disclosed on column 13, lines 64-column 14, lines 5, "The encrypted document key 100 is formed by encrypting the document key obtained during the step 110 with the public key of the member in question, which was obtained during the step 116. Note that the underlying document key is the same for each member of the collaborative group,*

*but the encrypted form 100 of the document key is unique to each member. Those of skill in the art will appreciate. that the encrypted document key 100 can be decrypted only by using the private key 80 that corresponds to the public key 78 used to encrypt the document-key. "See also "collaborative access controller 44" which is described on column 6, lines 11-22 as the access controller which restrict access to the members only. Non members are restricted from accessing the information. See for instance the following disclosed on column 6, lines 11-12, "users who are currently members of a collaborative group can readily access the information, while users who are not currently members of the group cannot" ] a*

**private key of a key pair for use in encrypting the document** [column 14 lines 16-22 and column 14, lines 4-5] ("As noted, the member definition 96 includes the encrypted message digest 102 if the member in question has collaboratively signed the document 90. As explained in greater detail below in connection with FIG. 10, the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and **then encrypting that message digest with the private key 80 of the member who is signing the document 90."**

*Furthermore on column 14, lines 4-5, it has also been disclosed that the private key 80 is a key pair which corresponds to the public key 78. Thus, the message digest 102 which is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90 implicitly contains the private key of the member who is signing the document. With out the private key, it is not possible to produce the said message*

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*digest. Furthermore as it is disclosed on column 14, lines 4-5, the private key 80 is a key pair which corresponds to the public key 78 and this meets the argued limitation, "building a member definition comprising, a private key of a key pair for use in encrypting the document")*

**and a digital signature,***[See also figure 5, ref. Num "102", "encrypted message digest", signed by the private key. In particular see what is disclosed on column 14, lines 15-21, "the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90." See also the abstract and column 6, lines 11-12, "collaborative signatures such that members of the group can digitally sign a particular version of the data portion. These collaborative signatures can then be used to advantage in ways similar to conventional individual digital signatures. For instance, the collaborative signatures can be used to identify the signing member."]*

**and associating the member definition with the user.** *[Figure 5 and column 6, lines 11-22, See "Users who are currently members of a collaborative group can readily access the information, while users who are not currently members of the group cannot"]*

and

- **Linking the member definition to a portion of a document.** *[Figure 6, ref. Num "120"] ("Link member definition(s) with document.")*

**Carter** does not explicitly disclose

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linking the member definition to a first data portion of a document, wherein the document has the first data portion and a second data portion, receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right

However, in the same field of endeavor, **Rider** discloses,

**Linking the member definition to a first data portion of a document, wherein the document has the first data portion and a second data portion,** [paragraph 0044, figure 4A & 0034-0035] *(As shown, document 400 includes descriptor portion 402 and data portion 404. Descriptor portion 402 can include basic information about the device and its operation whereas data portion 404 can include actual data, which can be employed by specific applications. Portion 406 is a portion of data 404 that has its access governed in accordance with the principles of tier two security as described herein. That is, **one or more access rights can be associated with portion 406**. Although one portion 406 is shown, an ordinarily skilled artisan will appreciate that the same or other access rights can govern other portions of data portion 404.)*

**Receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right** [Paragraph 0034-0035 paragraph 0044, figure 4A] *(On paragraph 0034, the following has been disclose. Moreover, security manager 170 can permit, restrict or completely deny a user **request to access one or more documents** as well as the contents of those*

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*documents. A document or a portion thereof can represent a command for, or a configuration of, one of devices 135 such as a router or switch. Security manager 170 governs by determining whether a particular user has access rights to a specific network resource, **a particular document or only a portion of a document. Furthermore on paragraph 0035, the following has been disclosed.** “By restricting access in relation to a document's content, a more fine-grained approach to configuring, managing and monitoring network resources is realized. Hence, tier two security restricts a user to data **constituting a portion of an entire document rather than providing complete or no access to that document.** For example, FIG. 4A depicts **document portion 406 that is accessible. Note that other portions of document 400 are not necessarily accessible to that user.”)***

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the feature such as linking the member definition to a first data portion of a document, wherein the document has the first data portion and a second data portion and receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right as per teachings of **Rider** into the method as taught by **Carter**, in order to provide a more fine-grained access control to the resources (portions of documents) [See For instance *Rider* on paragraph 0035]

**The combination of Carter and Rider does** not explicitly disclose that the access control is actually the "access control list"

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However, in the same field of endeavor **Frey at least on column 10, lines 5-11, figure 4, ref. Num "438", column 4, lines 35-40 and figure 1, ref. Num "144" discloses the following** which meets the limitation recited as "access control list". "In accordance with a preferred embodiment, portal database 424 further comprises a user profile table 430, a group profile table 432, a group membership table 434, an object security table 436, and an **ACL (access control list)** sync map 438 (hereinafter synchronization map 438), these tables and maps comprising information as will be described further infra."

Furthermore on column 4, lines 35-40 and figure 1, ref. Num "144", the following has also been disclosed which meets the limitation recited as "access control list" "For each document in that set, the **access control list 144 is checked** to see if that portal user **has access permission to that document**, or if that user is a member of a portal group having access permission to that document. The portal user is only presented with a listing of documents for which they have access permission."

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to employ features such as access control as per teachings of **Frey** into the method of "access control" as taught by the combination of **Carter and Rider**, in order to enhance the security by providing further fine-grained access control to the resources) [*See For instance Frey column 4, lines 35-40* ]

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14. **As per dependent claim 4 the combination of Carter, Rider and Frey**  
discloses a method as applied to claims above. Furthermore, Carter  
discloses the method, further comprising adding a new user to the  
document. [Figure 7, column 7, lines 3-5] (“adding a new member”)
15. **As per dependent claim 5 the combination of Carter, Rider and Frey**  
discloses a method as applied to claims above. Furthermore, Carter  
discloses the method, further comprising removing a member from the  
document. [Figure 8, column 7, lines 5-7] (“removing a member”)
16. **As per dependent claim 6 the combination of Carter, Rider and Frey**  
discloses a method as applied to claims above. Furthermore, Carter  
discloses the method further comprising: storing the member definition  
remotely from the document. [column 14, lines 35-38]
17. **As per dependent claim 7 the combination of Carter, Rider and Frey**  
discloses a method as applied to claims above. Furthermore, Carter  
discloses the method further comprising: storing the member definition in  
the document. [Column 14, lines 31-34] ( “In one embodiment, linking is  
accomplished by **storing** the encrypted data portion 94 and the prefix portion 92  
(including one or more **member definitions** 96) together in a file on a disk, tape, or  
other conventional **storage** medium.”)
18. **As per dependent claim 8 the combination of Carter and Frey** discloses a  
method as applied to claims above. Furthermore, Carter discloses the  
method further comprising: further comprising:

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**encrypting the document; and linking the member definition with a public key and a private key.***[column 11, lines 61- column 12, lines 7]*

19. **As per claims 9-10 the combination of Carter, Rider and Frey** discloses a method as applied to claims above. Furthermore, Rider discloses the method, further comprising: determining a second access right for the user; building a second member definition using the second access right; and linking the second member definition to a second portion of a document [Paragraph 0034-0035 paragraph 0044, figure 4A].

20. **Claims 11-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stephen R. Carter** (hereinafter referred as **Carter**)(U.S. Patent No. 5,787,175) (Date of patent 28, 1998), in view of **Rider** (hereinafter referred to as **Rider**) (U.S. Patent Publication 2006/0173999 A1) (filed on 08/07/2003, claims priority of a provisional application filed on 08/07/2002)

21. **As per independent claim 11 Carter** discloses a method for controlling access to a document, [Abstract] **comprising:**

- **A document comprising a first data and a second data.***[ “the documents, which are indicated as 4, ref. Num “92” could be more than one as it is indicated on column 14, lines 23-24 and figure 4-6, the system builds one or more member definitions which is associated with one or more documents.]*



**a first member definition** [figure 5, ref. Num "96", "Member definition "]  
**associated with the first data**[See figure 4, ref. Num "92"/"document "]  
**wherein the first member definition contains a first user identifier** [Figure 5, ref. Num "98"] **and a private key of a key pair for use in encrypting the document** [column 14 lines 16-22 and column 14, lines 4-5] ("As noted, the member definition 96 includes the encrypted message digest 102 if the member in question has collaboratively signed the document 90. As explained in greater detail below in connection with FIG. 10, the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and **then encrypting that message digest with the private key 80 of the member who is signing the document 90.**")

Furthermore on column 14, lines 4-5, it has also been disclosed that the private key 80 is a key pair which corresponds to the public key 78. Thus, the message digest 102 which is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90 implicitly contains the private key of the member who is signing the document. With out the private key, it is not possible to produce the said message digest. Furthermore as it is disclosed on column 14, lines 4-5, the private key 80 is a key pair which corresponds to the public key 78 and this meets the argued limitation, "building a member definition comprising, a private key of a key pair for use in encrypting the document")

**a first access right for a first user for the first data** [Figure 5, ref. Num "100"; see the "encrypted document key" which is encrypted by the member's public

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*key. Only the Member who has access to the information could use his corresponding private key to decrypt and get the document key which allows the member to access the document. In particular see the following which is disclosed on column 13, lines 64-column 14, lines 5, "The encrypted document key 100 is formed by encrypting the document key obtained during the step 110 with the public key of the member in question, which was obtained during the step 116. Note that the underlying document key is the same for each member of the collaborative group, but the encrypted form 100 of the document key is unique to each member. Those of skill in the art will appreciate. that the encrypted document key 100 can be decrypted only by using the private key 80 that corresponds to the public key 78 used to encrypt the document-key."];*

**As it is indicated 14, lines 23-24 and figure 4-6, the system builds one or more member definitions. And the member definitions shown on figure 5, is associated to the documents shown on figure 4. Even though only one document is shown on figure 4, ref. Num "54, 90" the system is built for one or more documents. See the documents described on column 9, lines 35.**

**Thus the following is also correct.**

**a second member definition** [figure 5, ref. Num "96", "Member definition "] **associated with the second data** [See figure 4, ref. Num "92"/"document "], **wherein the second member definition contains a second user identifier**[Figure 5, ref. Num "98"] **and a private key of a second key pair for use in encrypting the second data** [column 14 lines 16-22 and column 14,

lines 4-5] (“As noted, the member definition 96 includes the encrypted message digest 102 if the member in question has collaboratively signed the document 90. As explained in greater detail below in connection with FIG. 10, the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and **then encrypting that message digest with the private key 80 of the member who is signing the document 90.**” Furthermore on column 14, lines 4-5, it has also been disclosed that the private key 80 is a key pair which corresponds to the public key 78. Thus, the message digest 102 which is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90 implicitly contains the private key of the member who is signing the document. With out the private key, it is not possible to produce the said message digest. Furthermore as it is disclosed on column 14, lines 4-5, the private key 80 is a key pair which corresponds to the public key 78 and this meets the argued limitation, “building a member definition comprising a , private key of a second key pair for use in encrypting the second data”)

**and a second access right for a second user for the second data;** [Figure 5, ref. Num “100”; see the “encrypted document key” which is encrypted by the member’s public key. Only the Member who has access to the information could use his corresponding private key to decrypt and get the document key which allows the member to access the document. In particular see the following which is disclosed on column 13, lines 64-column 14, lines 5, “The encrypted document key 100 is formed by encrypting the document key obtained during the step 110

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*with the public key of the member in question, which was obtained during the step 116. Note that the underlying document key is the same for each member of the collaborative group, but the encrypted form 100 of the document key is unique to each member. Those of skill in the art will appreciate that the encrypted document key 100 can be decrypted only by using the private key 80 that corresponds to the public key 78 used to encrypt the document-key.”];*

**Carter** does not explicitly disclose

Wherein the document has the first data portion and a second data portion, receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right

However, in the same field of endeavor, **Rider** discloses,

**Linking the member definition to a first data portion of a document,**

**wherein the document has the first data portion and a second data**

**portion,** [paragraph 0044, figure 4A & 0034-0035] *(As shown, document 400 includes descriptor portion 402 and data portion 404. Descriptor portion 402 can include basic information about the device and its operation whereas data portion 404 can include actual data, which can be employed by specific applications.*

*Portion 406 is a portion of data 404 that has its access governed in accordance with the principles of tier two security as described herein. That is, **one or more access rights can be associated with portion 406.** Although one portion 406 is shown, an ordinarily skilled artisan will appreciate that the same or other access rights can govern other portions of data portion 404.)*

**Receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right** [Paragraph 0034-0035

paragraph 0044, figure 4A] *(On paragraph 0034, the following has been disclose.*

*Moreover, security manager 170 can permit, restrict or completely deny a user*

**request to access one or more documents** *as well as the contents of those*

*documents. A document or a portion thereof can represent a command for, or a*

*configuration of, one of devices 135 such as a router or switch. Security manager*

*170 governs by determining whether a particular user has access rights to a*

*specific network resource, **a particular document or only a portion of a***

**document. Furthermore on paragraph 0035, the following has been**

**disclosed.** *“By restricting access in relation to a document's content, a more fine-*

*grained approach to configuring, managing and monitoring network resources is*

*realized. Hence, tier two security restricts a user to data **constituting a portion***

**of an entire document rather than providing complete or no access to**

**that document.** *For example, FIG. 4A depicts **document portion 406 that is***

**accessible. Note that other portions of document 400 are not necessarily**

**accessible to that user.”)**

It would have been obvious to one having ordinary skill in the art, at the time

the invention was made, to combine the feature such as linking the member

definition to a first data portion of a document, wherein the document has the

first data portion and a second data portion and receiving a request from the

user to access the document; comparing the request with the access right; and

allowing access to only the first data portion in accordance with the access right

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as per teachings of **Rider** into the method as taught by **Carter**, in order to provide a more fine-grained access control to the resources (portions of documents) [See For instance Rider on paragraph 0035].

**22. Independent claim 21 is rejected on the same reason as that of the above independent claim 11, However independent claim 21 further recites additional limitation. Thus the following rejection only considers the additional limitation.**

**As per independent claim 21 Carter discloses a method for controlling access to a document, [Abstract] comprising:**

- **Determining an access right for a user; (Column 12, lines 56-63; column 15, lines 62-67; abstract and column 8, lines 27-29) Access Control**  
*Methods FIGS. 4-9 illustrate one method according to the present invention for controlling collaborative access to the work group document 90. In particular, the method includes computer-implemented steps for collaboratively encrypting the document 90 (FIG. 6) and steps for restricting access to the data portion 94 of the collaboratively encrypted document (FIG. 9)).*
- **building a member definition [Figure 5, see "member definition"] comprising a member identifier [Figure 5, ref. Num "98", See "member identifier"], an access control [See column 12, lines 56-57; column 13, lines 52-62, see figure 5, ref. Num 100, "encrypted document key" signed by the public key of the member. Only the member with the corresponding private key can**

*access the document. In particular see the following which is disclosed on column 13, lines 64-column 14, lines 5, "The encrypted document key 100 is formed by encrypting the document key obtained during the step 110 with the public key of the member in question, which was obtained during the step 116. Note that the underlying document key is the same for each member of the collaborative group, but the encrypted form 100 of the document key is unique to each member. Those of skill in the art will appreciate. that the encrypted document key 100 can be decrypted only by using the private key 80 that corresponds to the public key 78 used to encrypt the document-key. "See also "collaborative access controller 44" which is described on column 6, lines 11-22 as the access controller which restrict access to the members only. Non members are restricted from accessing the information. See for instance the following disclosed on column 6, lines 11-12, "users who are currently members of a collaborative group can readily access the information, while users who are not currently members of the group cannot"]*

**and a private key of a key pair for enabling the first user to encrypt the document** [column 14 lines 16-22 and column 14, lines 4-5] ("As noted, the member definition 96 includes the encrypted message digest 102 if the member in question has collaboratively signed the document 90. As explained in greater detail below in connection with FIG. 10, the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and **then encrypting that message digest with the private key 80 of the member who is signing the document 90.**"

*Furthermore on column 14, lines 4-5, it has also been disclosed that the private key 80 is a key pair which corresponds to the public key 78. Thus, the message*

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*digest 102 which is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90 implicitly contains the private key of the member who is signing the document. With out the private key, it is not possible to produce the said message digest. Furthermore as it is disclosed on column 14, lines 4-5, the private key 80 is a key pair which corresponds to the public key 78 and this meets the argued limitation, "building a member definition comprising, a private key of a key pair for use in encrypting the document")*

**and a digital signature,**[See also figure 5, ref. Num "102", "encrypted message digest", signed by the private key. In particular see what is disclosed on column 14, lines 15-21, "the encrypted message digest 102 is formed by generating a message digest based on the current contents of the data portion 94 of the document 90 and then encrypting that message digest with the private key 80 of the member who is signing the document 90." See also the abstract and column 6, lines 11-12, "collaborative **signatures** such that members of the group can digitally sign a particular version of the data portion. These collaborative **signatures** can then be used to advantage in ways similar to conventional individual digital **signatures**. For instance, the collaborative **signatures** can be used to identify the signing member."]**and associating the member definition with the user.** [Figure 5 and column 6, lines 11-22, See "Users who are currently members of a collaborative group can readily access the information, while users who are not currently members of the group cannot"]



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and

- **Linking the member definition to a portion of a document.** *[Figure 6, ref. Num "120"] ("Link member definition(s) with document.")*

**Carter** does not explicitly disclose

linking the member definition to a first data portion of a document, wherein the document has the first data portion and a second data portion, receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right

However, in the same field of endeavor, **Rider** discloses,

**Linking the member definition to a first data portion of a document, wherein the document has the first data portion and a second data portion,** [paragraph 0044, figure 4A & 0034-0035] *(As shown, document 400 includes descriptor portion 402 and data portion 404. Descriptor portion 402 can include basic information about the device and its operation whereas data portion 404 can include actual data, which can be employed by specific applications. Portion 406 is a portion of data 404 that has its access governed in accordance with the principles of tier two security as described herein. That is, **one or more access rights can be associated with portion 406**. Although one portion 406 is shown, an ordinarily skilled artisan will appreciate that the same or other access rights can govern other portions of data portion 404.)*

**Receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data**

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**portion in accordance with the access right** [Paragraph 0034-0035 paragraph 0044, figure 4A] *(On paragraph 0034, the following has been disclose. Moreover, security manager 170 can permit, restrict or completely deny a user request to access one or more documents as well as the contents of those documents. A document or a portion thereof can represent a command for, or a configuration of, one of devices 135 such as a router or switch. Security manager 170 governs by determining whether a particular user has access rights to a specific network resource, a particular document or only a portion of a document. Furthermore on paragraph 0035, the following has been disclosed. “By restricting access in relation to a document's content, a more fine-grained approach to configuring, managing and monitoring network resources is realized. Hence, tier two security restricts a user to data constituting a portion of an entire document rather than providing complete or no access to that document. For example, FIG. 4A depicts document portion 406 that is accessible. Note that other portions of document 400 are not necessarily accessible to that user.”)*

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the feature such as linking the member definition to a first data portion of a document, wherein the document has the first data portion and a second data portion and receiving a request from the user to access the document; comparing the request with the access right; and allowing access to only the first data portion in accordance with the access right as per teachings of **Rider** into the method as taught by **Carter**, in order to

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provide a more fine-grained access control to the resources (portions of documents) [See For instance Rider on paragraph 0035]

23. **As per dependent claims 12-13 the combination of Carter and Rider**

discloses a method as applied to claims above. Furthermore, Rider discloses the method, wherein the access controller limits access to the document in accordance with the first access right and the second access right. And, wherein the first user identifier and the second user identifier identify the same user and the first access right and the second access right identify different access rights [Paragraph 0034-0035 paragraph 0044, figure 4A].

24. **As per dependent claim 14 the combination of Carter and Rider discloses a method as applied to claims above. Furthermore, Carter discloses the method wherein the first member definition contains a digital signature.**

[Abstract and figure 10, ref. Num "184"]

25. **As per dependent claim 15 the combination of Carter and Rider discloses a method as applied to claims above. Furthermore, Carter discloses the method wherein the first member definition and second member definition are stored remotely from the document. [column 14, lines 35-38]**

26. **As per claim dependent 16 the combination of Carter and Rider discloses a method as applied to claims above. Furthermore, Carter discloses the method where in the first and second the member definition are stored in the document. [Column 14, lines 31-34] ( "In one embodiment, linking is accomplished by ~~storing~~ the encrypted data portion 94 and the prefix portion 92**

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(including one or more ~~member definitions~~ 96) together in a file on a disk, tape, or other conventional ~~storage~~ medium.”)

- 27. As per dependent claims 17-20 the combination of Carter and Rider discloses a method as applied to claims above. Furthermore, Carter discloses the method wherein the document is tagged document/XML document/text document/binary document. [Column 9, lines 32-61]**

### ***Conclusion***

- 28. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Samson B Lemma/

Examiner, Art Unit 2432

/Jung Kim/

Primary Examiner, AU 2432